XI congresso nazionale

simeu

ROMA 24-26 MAGGIO 2018

FRAGILE O DELICATO?

mario guarino aspirante medico d'urgenza

Qualche domanda…

Quando si diventa anziani?

Come si fa
a non
invecchiare?

Un’altra

domanda…

Gli anziani sono fragili?

Gli

anziani sono

delicati …

sono
fragili
quando chiedono
il nostro aiuto!

spesso
siamo noi
a renderli
fragili

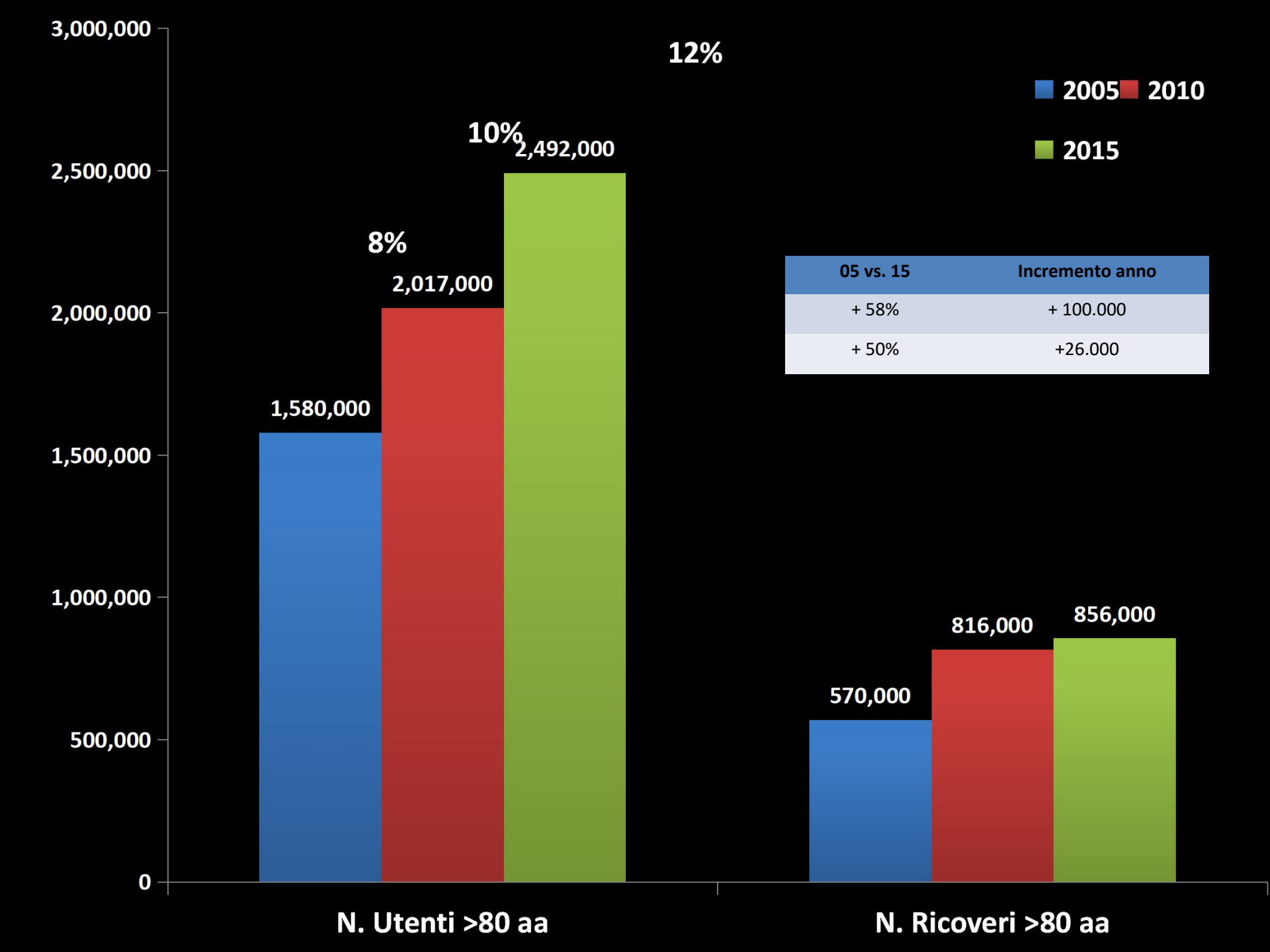
Table 3: Population and Proportion of 65+ Inhabitants

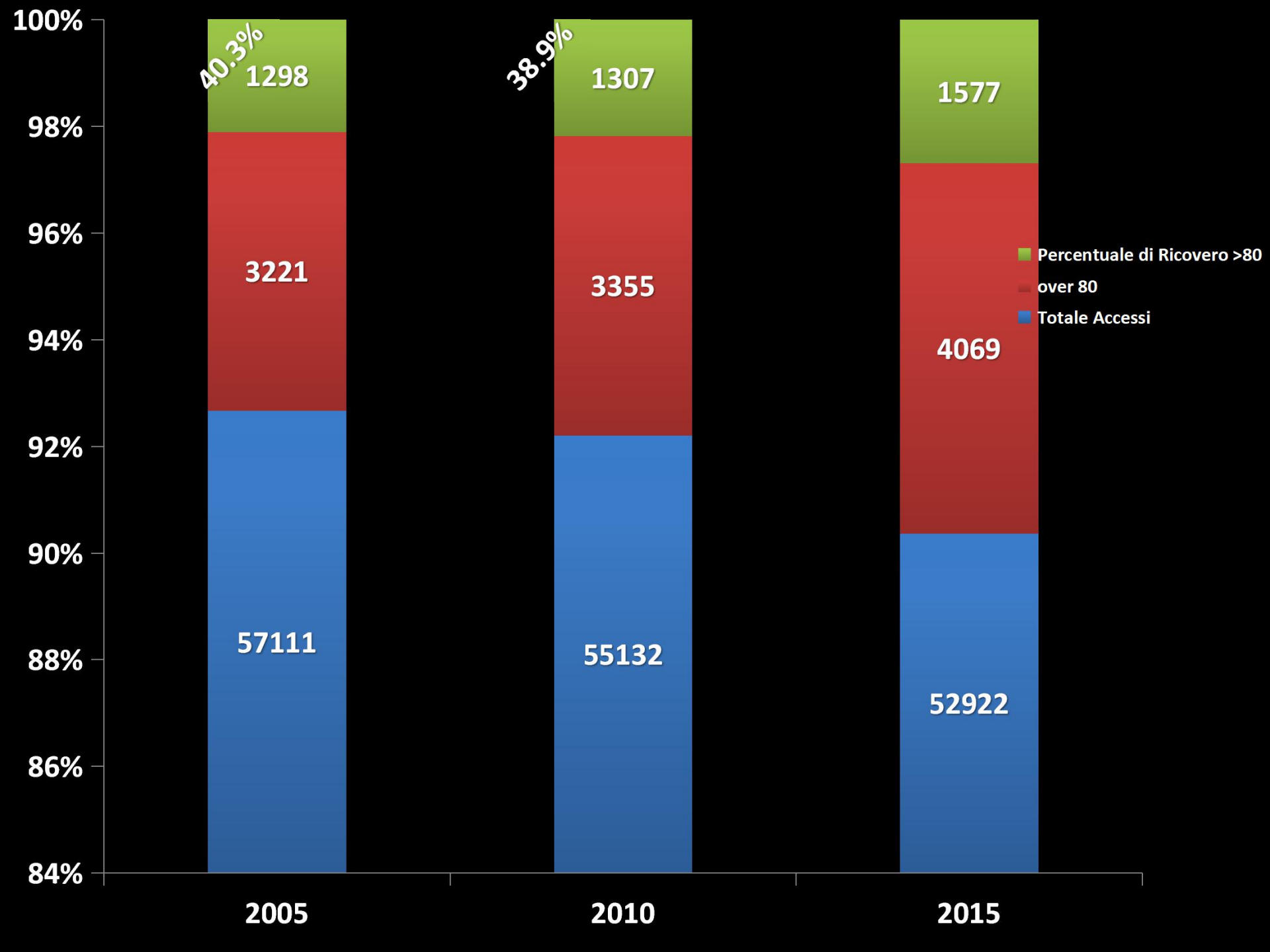
Country	Population (million)	No. Citizens 65+	Proportion of population (%)
Austria[1]	8.4	1.5	17.3
Belgium	10.8	NK	17.0
France	65.0 (including overseas population)	10.9	16.9
Germany	81.8	16.9	20.6
Ireland[2]	4.5	0.53	11.4
Italy	60.3	12.2	20.4
The Netherlands	16.6	2.5	15.2
Norway	4.9	0.74	14.8
Portugal	10.6	1.8	17.7
Spain	47.0	7.9	17.2
Sweden	9.4	1.7	18.0
Switzerland	7.8	1.3	17.3
United Kingdom	61.0	9.8	15.8

Source: OECD (2011)(unless stated otherwise)

[1] Statistics Austria 2012

[2] Central Statistics Office Ireland (2011)


3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
12%
10%
8%
2005
2010
2015
2,492,000
2,017,000
1,580,000
816,000
856,000
570,000
05 vs. 15
Incremento anno
+ 58%
+ 100.000
+ 50%
+26.000
N. Utenti >80 aa
N. Ricoveri >80 aa


100%
98%
96%
94%
92%
90%
88%
86%
84%
40.3%
1298
3221
57111
38.9%
1307
3355
55132
1577
4069
52922
2005
2010
2015
Percentuale di Ricovero >80
over 80
Totale Accessi

EVALUATION OF SHORT-TERM EFFECTIVENESS OF THE DISEASE MANAGEMENT PROGRAM "DI.PRO.DI." ON CONTINUITY OF CARE OF PATIENTS WITH CONGESTIVE HEART FAILURE

Leandro Pecchia, PhD
Department of Biomedical, Electronic and Telecommunication Engineering
University Federico II of Naples
Naples, Italy

Fernando Schiraldi, MD
Sossio Verde, MD

Table 1. Rehospitalizations and Hospital Length of Stay According to Group in the 3 Months After Discharge

Outcome	Control Group (n = 18)	Treatment Group: Before Di.Pro.Di* (n = 6)	Treatment Group: After Di.Pro.Di (n = 16)
Rehospitalizations, n			
Patients rehospitalized	11	5	4
Rehospitalizations	17	11	4
Length of hospital stay			
Days per group, n	234	69	17
Days per patient, mean ± standard deviation	13.0 ± 7.7	11.5 ± 7.2	1.1 ± 2.1

*Disease management program "Dimissione Protetta Difficile" (Di.Pro.Di).

CONCLUSION

Di.Pro.Di significantly reduced number of rehospitalizations and hospital length of stay. A possible reason is that Di.Pro.Di allows patients to be fully stabilized before complete discharge. As in other DMPs, Di.Pro.Di improved the education of patients and families, improving adherence to therapy and lifestyle after discharge. These preliminary results suggest that Di.Pro.Di improves the effectiveness of care for elderly patients with CHF.

Maria, 90 anni

- Dimessa il pomeriggio dalla nostra M.U. per shock settico end-stage

- 7 figli di cui 2 al Nord

“il professore ha detto che deve fare la dialisi!”

Scand J Rheumatol 2016;00:1–9

Chronic pain in older adults: prevalence, incidence, and risk factors

C Larsson[1], EE Hansson[2], K Sundquist[1,3], U Jakobsson[1]

[1]Centre for Primary Health Care Research, Lund University/Region Skåne, Malmö, Sweden
[2]Department of Clinical Sciences in Malmö/Family Medicine, Lund University, Malmö, Sweden
[3]Stanford Prevention Research Center, Stanford University School of Medicine, Stanford, CA, USA

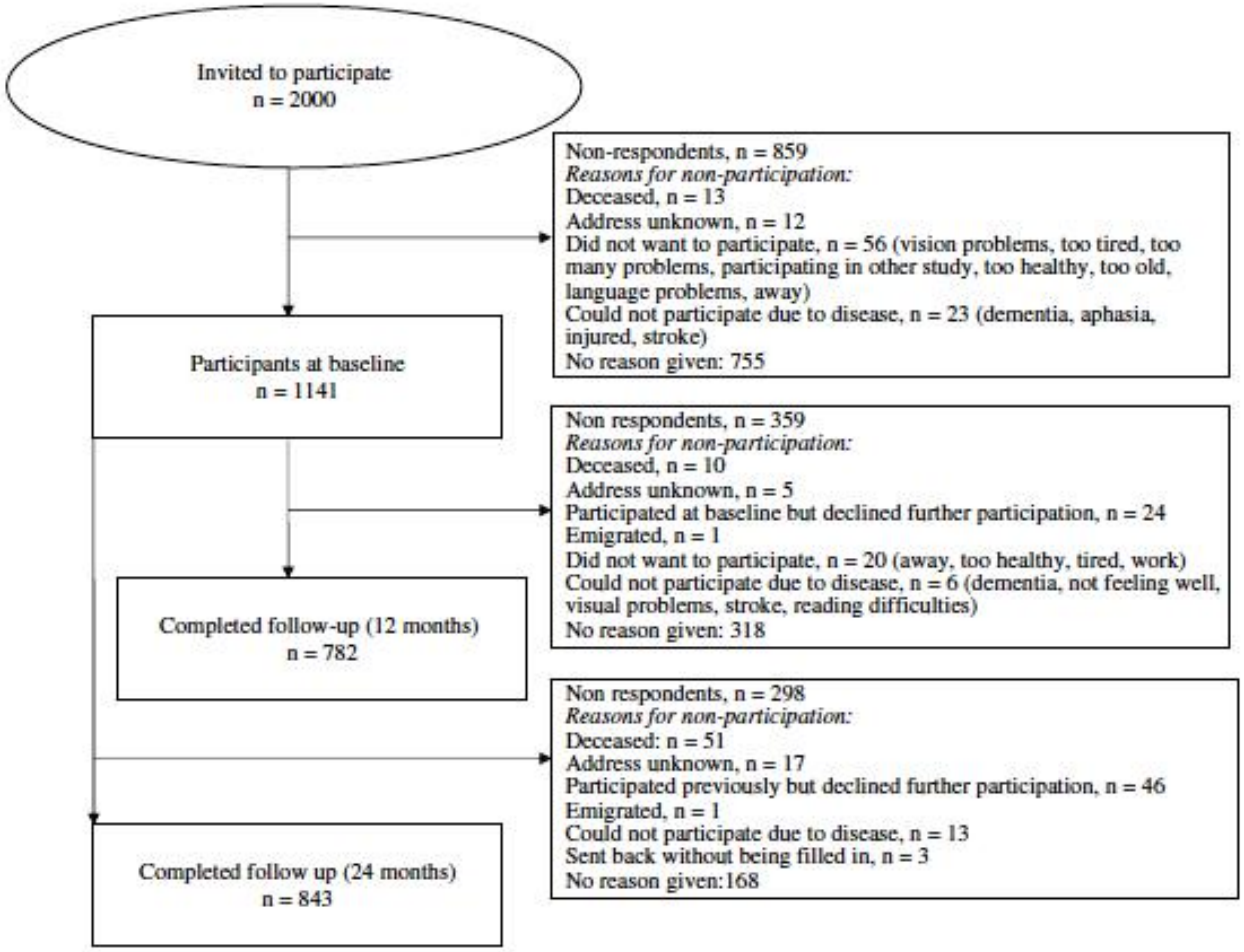


Figure 1. Flowchart of participants included in the current study.

Scand J Rheumatol 2016;00:1–9

Chronic pain in older adults: prevalence, incidence, and risk factors

C Larsson[1], EE Hansson[2], K Sundquist[1,3], U Jakobsson[1]

[1]Centre for Primary Health Care Research, Lund University/Region Skåne, Malmö, Sweden
[2]Department of Clinical Sciences in Malmö/Family Medicine, Lund University, Malmö, Sweden
[3]Stanford Prevention Research Center, Stanford University School of Medicine, Stanford, CA, USA

Table 3. Pain characteristics at baseline in participants reporting chronic pain*, divided by age strata.

	Total sample (n = 433)	65–74 years (n = 247)	75–84 years (n = 122)	≥ 85 years (n = 59)
Pain duration (years), median (q3–q1)	5.00 (14.00–2.00)	5.00 (14.00–2.00)	5.00 (15.00–2.00)	3.5 (10.00–2.00)
Pain intensity, mean (sd) range †	3.22 (1.07) 1–6	3.16 (1.06) 1–6	3.30 (1.04) 1–5	3.34 (1.38) 2–6
Received any diagnosis for their pain (%)	66.5	69.1	58.6	73.7
Primary pain location (%)				
Upper extremities	13.4	15.6	9.9	12.3
Shoulder/neck	10.2	12.2	5.4	10.5
Lower extremities	30.7	26.2	34.2	40.4
Thorax/abdomen	4.6	3.8	7.2	3.5
Back/pelvis	34.1	35.0	36.0	28.1
Head	3.9	4.2	3.6	3.5
Other	2.9	3.0	3.6	1.8
More than one pain location (%)	43.5	43.9	38.5	51.7
Using pain medications (%)	58.2	46.3	68.8	69.5
MPI score, mean (sd)				
Pain severity	3.01 (1.06)	3.03 (1.04)	3.17 (1.05)	3.28 (1.17)
Interference	3.14 (1.67)	2.89 (1.57)	3.29 (1.78)	3.88 (1.62)
Life control	4.52 (1.30)	4.70 (1.27)	4.39 (1.34)	4.00 (1.49)
Affective distress	2.36 (1.33)	2.28 (1.30)	2.54 (1.39)	2.40 (1.14)

MPI, Multidimensional Pain Inventory (MPI score ranging between 0 and 6: high score indicates high pain severity, interference, life control, affective distress).
* Pain of duration ≥ 3 months.
† Pain intensity = 'average level of pain in the last week', measured using a five-point Likert scale with answers ranging from 'No pain at all' to 'Tremendous amount of pain'.

Scand J Rheumatol 2016;00:1–9

Chronic pain in older adults: prevalence, incidence, and risk factors

C Larsson[1], EE Hansson[2], K Sundquist[1,3], U Jakobsson[1]

[1]Centre for Primary Health Care Research, Lund University/Region Skåne, Malmö, Sweden
[2]Department of Clinical Sciences in Malmö/Family Medicine, Lund University, Malmö, Sweden
[3]Stanford Prevention Research Center, Stanford University School of Medicine, Stanford, CA, USA

Predictors for persistence of chronic pain were female gender, reporting higher pain intensity, longer pain duration, and more than one pain location. No stable predictors could be identified for the onset of chronic pain.

Conclusions

The results show that the prevalence of chronic pain was common, stable over time, and increased at the age of 85. Although the pain was often of long duration and persistent, our results show that both recovery and onset of pain occurred in old age, with an incidence of 5.4% per year. Pain characteristics, such as intensity/severity, duration, and number of locations, rather than age-related symptoms and psychosocial variables, were able to predict the persistence of chronic pain among older women but not among men. Our findings highlight the importance of early pain management in the prevention of future pain and merit further investigation into the causality of chronic pain among older adults.

Table 1 Estimated incidence of chronic postoperative pain and disability after selected surgical procedures† [72]

	% of Patients		
	Estimated Incidence of Chronic Pain	Estimated Chronic Severe (Disabling) Pain (>5 out of 10)	United States Surgical Volumes (1000s)
Amputation	30–50	5–10	159 (lower limb only)
Breast surgery (lumpectomy and mastectomy)	20–30	5–10	479
Thoracotomy	30–40	10	Unknown
Inguinal hernia repair	10	2–4	609
Coronary artery bypass	30–50	5–10	598
Caesarean section	10	4	220

† Gall bladder surgery not included, since preoperative diagnosis of pain specifically from gall bladder is difficult, and persistent postoperative pain could therefore be related to other intra-abdominal disorders.

Sinatra, Pain Med, 2010

Misurare
Valutare
Trattatare
Rivalutare

MONITORAGGIO

The Journal of Emergency Medicine, Vol. 44, No. 1, pp. 46–52, 2013

0736-4679/$ - see front matter

ELSEVIER

http://dx.doi.org/10.1016/j.jemermed.2012.05.002

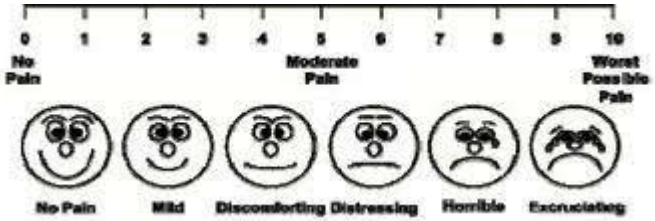
Original Contributions

PAIN SCORES AMONG EMERGENCY DEPARTMENT (ED) PATIENTS: COMPARISON BY ED DIAGNOSIS

Catherine A. Marco, MD, FACEP, William Kanitz, BS, and Matthew Jolly, BS

Department of Emergency Medicine, University of Toledo College of Medicine, Toledo, Ohio
Reprint Address: Catherine A. Marco, MD, FACEP, Department of Emergency Medicine, University of Toledo College of Medicine, Mail Stop 1088, 3045 Arlington Avenue, Toledo, OH 43614

Categoria	Punteggio 0	1	2
Volto	Espressione neutra o sorriso	Smorfie occasionali o sopracciglia corrugate, espressione distaccata, disinteressata	Da frequente a costante aggrottamento delle sopracciglia, bocca serrata, tremore del mento
Gambe	Posizione normale o rilassata	Si agita, è irrequieto, teso	Scalcia, o raddrizza le gambe
Attività	Posizione quieta, normale, si muove in modo naturale	Si contorce, si dondola avanti e indietro, teso	Inarcato, rigido o si muove a scatti
Pianto	Assenza di pianto (durante la veglia o durante il sonno)	Geme o piagnucola, lamenti occasionali	Piange in modo continuo, urla o singhiozza, lamenti frequenti
Consolabilità	Soddisfatto, rilassato	È rassicurato dal contatto occasionale, dall'abbraccio o dal tono della voce, è distraibile	Difficile da consolare o confortare



SCALA NRS A 11 punti per la MISURAZIONE DEL DOLORE (adulto)

Nessun dolore — Peggior dolore immaginabile

0	1	2	3	4	5	6	7	8	9	10

Chapman C.R. et al., Measurement of pain, Textbook of Management of pain Third edition Lippincott Williams & Wilkins, 2001, 210-228.

c. Visual Analog Scale (VAS)[2]

No pain — Pain as bad as it could possibly be

[1] If used as a graphic rating scale, a 10 cm baseline is recommended.
[2] A 10 cm baseline is recommended for VAS scales.

	0	1	2
RESPIRO (Indipendente dalla vocalizzazione)	Normale	Respiro a tratti alterato. Brevi periodi di iperventilazione	Respiro alterato Iperventilazione Cheyne-Stokes
VOCALIZZAZIONE	Nessuna	Occasionali lamenti Saltuarie espressioni negative	Ripetuti richiami Lamenti. Pianto
ESPRESSIONE FACCIALE	Sorridente o inespressiva	Triste, ansiosa, contratta	Smorfie.
LINGUAGGIO DEL CORPO	Rilassato	Teso Movimenti nervosi Irrequietezza	Rigidità. Agitazione Ginocchia piegate Movimento afinalistico, a scatti
CONSOLABILITA'	Non necessita di coinvolgimento	Distratto o rassicurato da voce o tocco	Inconsolabile; non si distrae né si rassicura

Punteggio
0 = nessun dolore
10= massimo dolore

- DOLOPLUS2 (Wary et al, 1992, France)
- ECPA- l'Echelle Comportamentale pour le Personne Agées (Alix et al, 1993, France)
- ECS- l'Echelle Comportamentale simplifée (Baulon et al, 1995, France)
- The Observational Pain Behaviour Tool (Simons &Malabar, 1995, UK)
- CNPI- Checklist of Non-verbal Pain Indicators (Feldt et al, 2000, USA)
- PACSLAC- Pain Assessment Checklist for Seniors with Limited Ability to Communicate (Hadjistavropoulos et al, 2002, Canada)
- PAINAD- Pain Assessment in Advanced Dementia (Warden, Hurley and Volicer, 2002, USA)
- PADE- Pain Assessment in Dementing Elderly (Villanueva et al, 2003, USA)
- RaPID- Rating Pain In Dementia (Sign &Orrel, 2003, UK)
- The Abbey Pain Scale (Abbey et al, 2004, Australia)
- NOPPAIN- the NOn communicative Patient's Pain Assessment INstrument (Snow et al, 2004, USA)
- Pain Assessment Tool for Use with Cognitive Impaired Adults (Davies et al, 2004, Australia)
- *PATCOA- the Pain Assessment Tool in Confused Older Adults (Decker & Perry, 2003)*

Quale sceglieresti?

ORIGINAL ARTICLE

Intervention Study with Algoplus®: A Pain Behavioral Scale for Older Patients in the Emergency Department

Fares Moustafa, MD*; Nicolas Macian, MSc†; Fatiha Giron, BSc†; Jeannot Schmidt, MD, PhD*; Bruno Pereira, PhD‡; Gisèle Pickering, MD, PhD, DPharm†,§,¶

*Emergency Department, CHU, Clermont-Ferrand; †CHU Clermont-Ferrand, Clinical Pharmacology Department, Clermont-Ferrand; ‡CHU Clermont-Ferrand, Biostatistics Unit, Clermont-Ferrand; §Inserm 1107 and 1405, Clermont-Ferrand; ¶Pharmacology Department, Medical Faculty, Clermont University, Clermont-Ferrand, France

ECHELLE ALGOPLUS*

Evaluation de la douleur

Echelle d'évaluation comportementale de la douleur aiguë chez la personne âgée présentant des troubles de la communication verbale

Identification du patient

Date de l'évaluation de la douleur	
Heure	
1 • Visage Froncement des sourcils, grimaces, crispation, mâchoires serrées, visage figé.	
2 • Regard Regard inattentif, fixe, lointain ou suppliant, pleurs, yeux fermés.	
3 • Plaintes « Aie », « Ouille », « J'ai mal », gémissements, cris.	
4 • Corps Retrait ou protection d'une zone, refus de mobilisation, attitudes figées.	
5 • Comportements Agitation ou agressivité, agrippement.	
Total OUI	
Professionnel de santé ayant réalisé l'évaluation	

L'échelle comporte cinq items (domaines d'observation). La présence d'un seul comportement dans chacun des items suffit pour coter « oui » l'item considéré

La simple observation d'un comportement doit impliquer sa cotation quelles que soient les interprétations étiologiques

En pratique, pour remplir la grille, observer dans l'ordre :

- Les expressions du visage
- Celles du regard
- Les plaintes émises
- Les attitudes corporelles
- Le comportement général

Chaque item coté « oui » est compté un point et la somme des items permet d'obtenir un score total sur cinq.

*Rat et al. Eur J Pain (2010) Collectif DOLOPLUS: www.doloplus.com

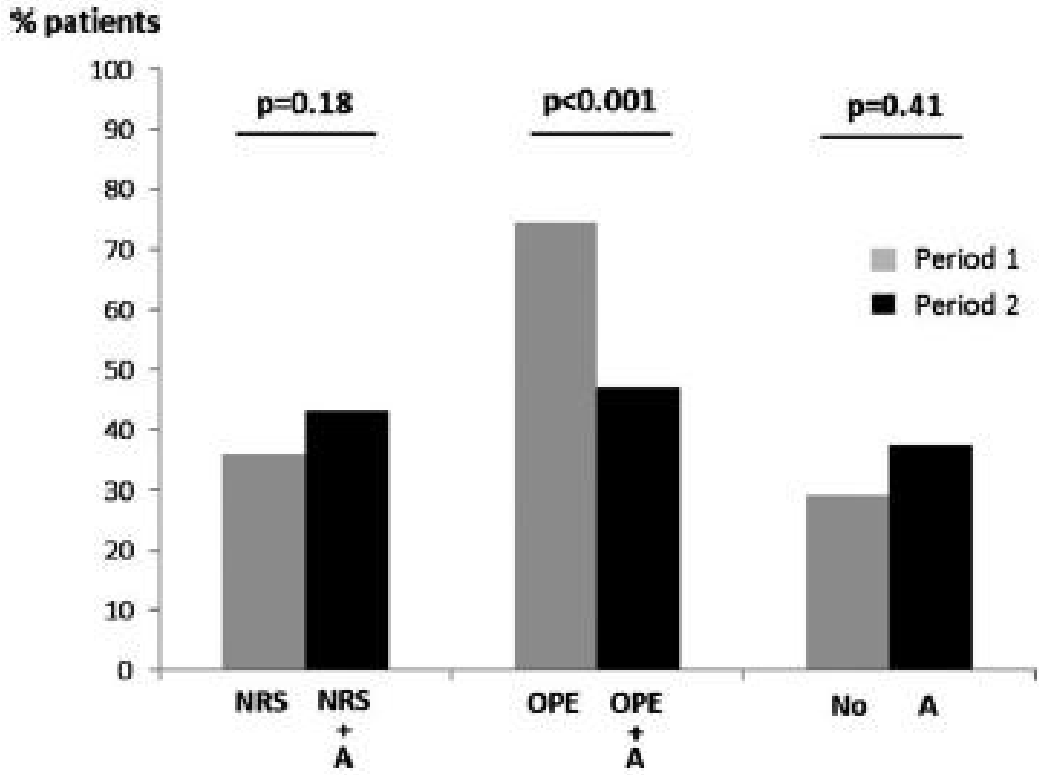


Figure 1. Analgesics prescriptions before and after intervention with Algoplus®. NRS, numeric rating scale; OPE, other pain evaluations; A, Algoplus®.

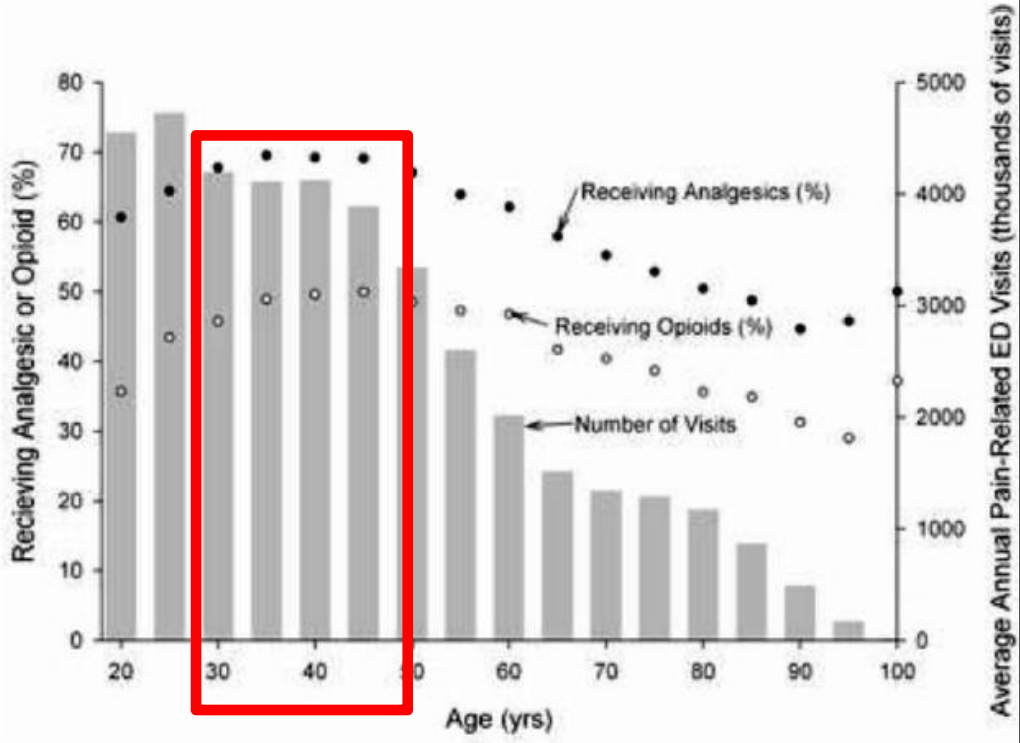
Con gli anziani non è facile!

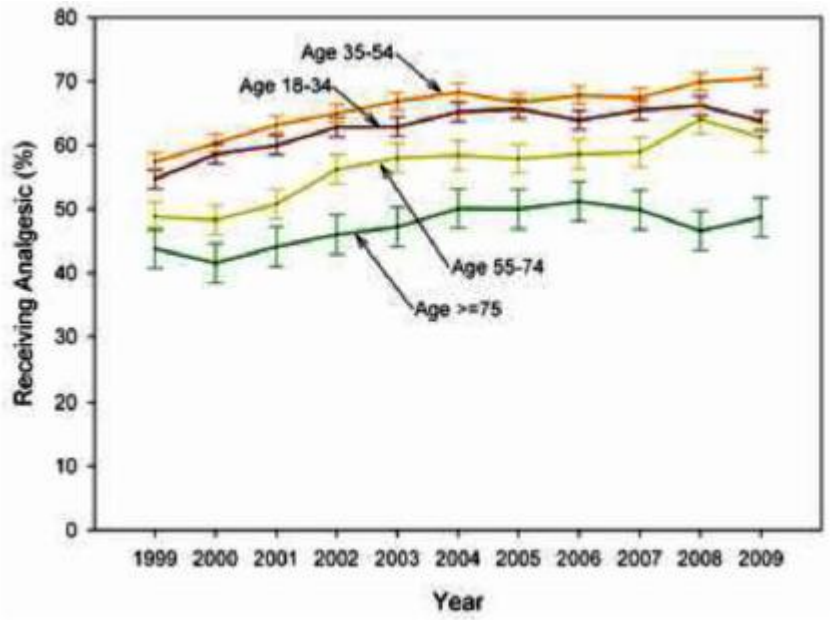

RS

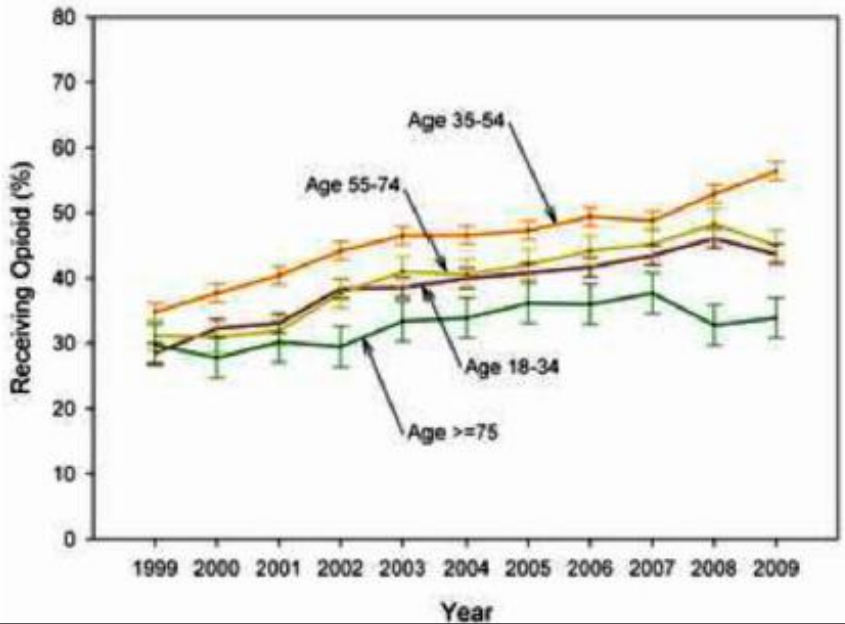
Published in final edited form as:
Ann Emerg Med. 2012 August ; 60(2): 199–206. doi:10.1016/j.annemergmed.2011.09.014.

Older US Emergency Department Patients are Less Likely to Receive Pain Medication than Younger Patients: Results from a National Survey

Timothy F. Platts-Mills, MD,
Department of Emergency Medicine and Department of Anesthesiology, University of North Carolina Chapel Hill, 101 Manning Drive, CB #7010, Chapel Hill, NC 27599-7010







Research Paper

PAIN

OPEN

Pain, agitation, and behavioural problems in people with dementia admitted to general hospital wards: a longitudinal cohort study

Elizabeth L. Sampson[a,b,*], Nicola White[a], Kathryn Lord[a], Baptiste Leurent[a], Victoria Vickerstaff[a], Sharon Scott[a], Louise Jones[a]

Table 4

Prescription of analgesia to people with dementia during acute hospital admission.

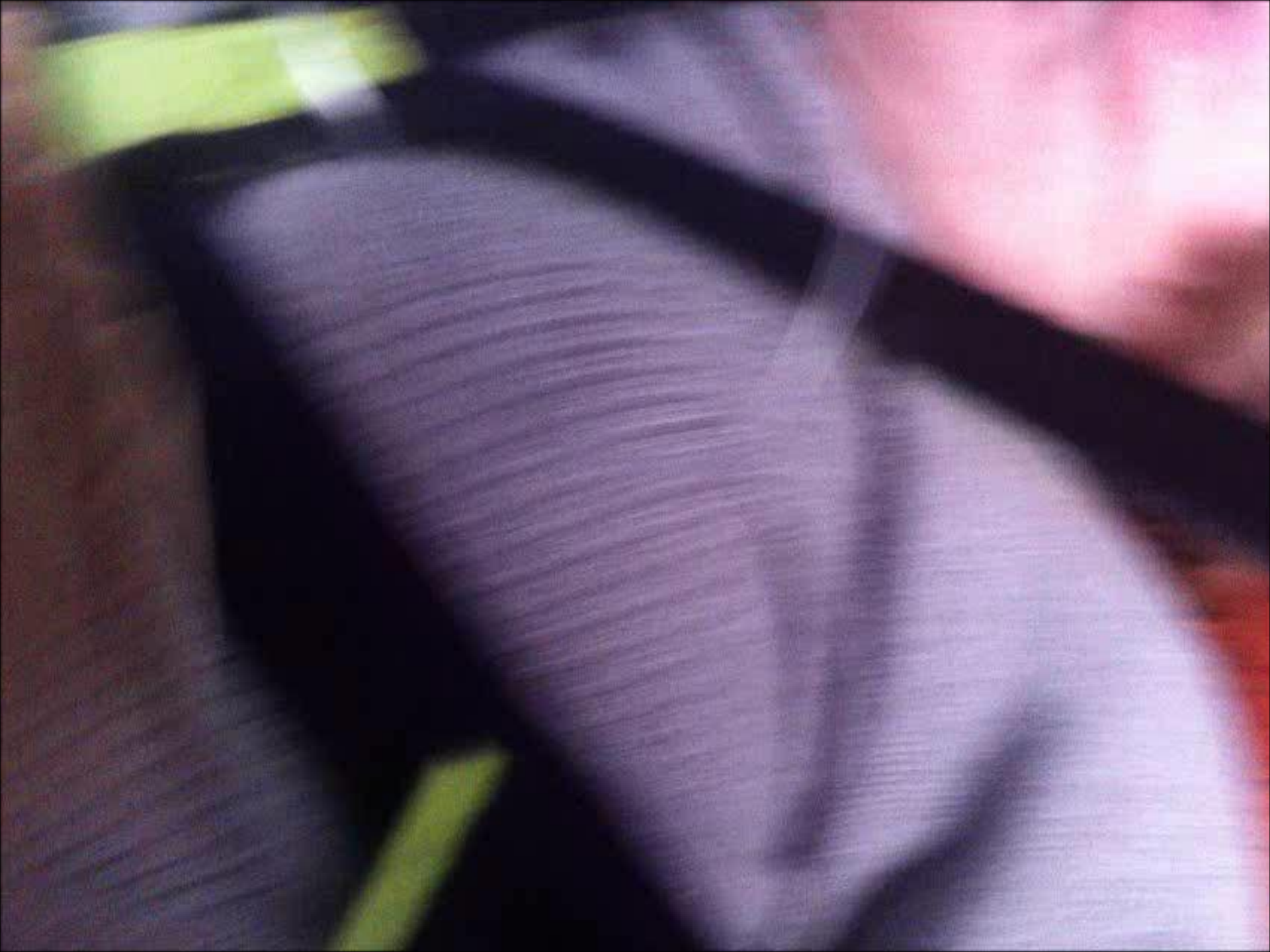
	At baseline (n = 230)		During admission* (n = 185†)	
	n	%	n	%
Paracetamol				
None	68	30	48	26
Regular	103	45	61	33
As required	59	25	76	41
Nonsteroidal anti-inflammatory drugs				
None	229	99	184	99
Regular	1	1	0	0
As required	0	0	1	1
Opiates				
None	155	67	127	69
Regular	32	14	32	17
As required	43	19	26	14

* Data from any assessments after baseline.

† Forty-three participants had only 1 assessment (at baseline) and 2 had missing data on analgesic prescribing at follow-up.

PASQUALE

Maria Pia




Beach Chair
Lager
OUR BEERS

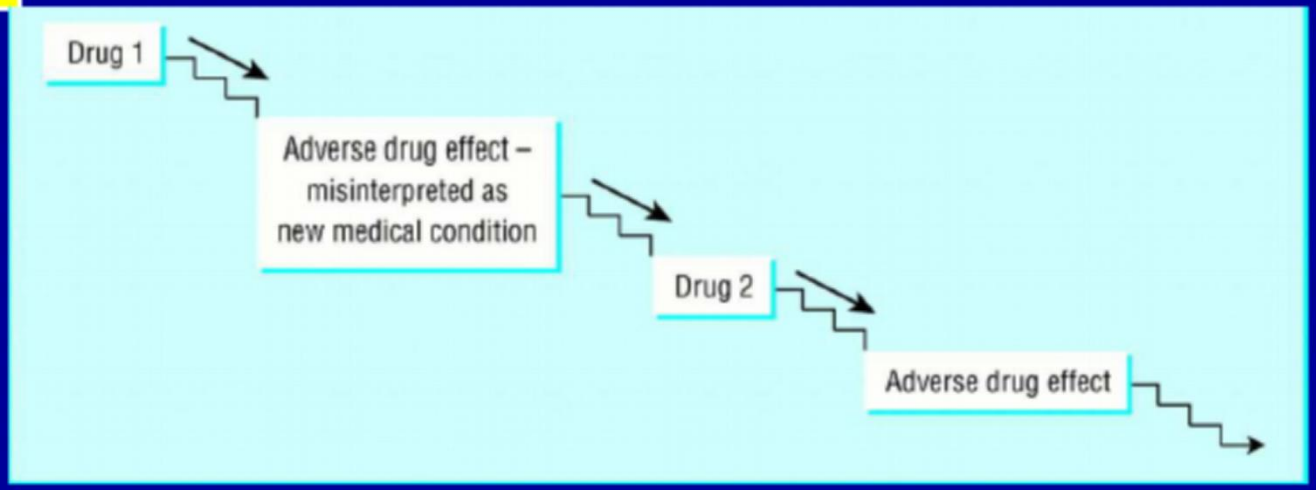
EA

Patologia di nuova insorgenza

Trattamento

Cascata delle prescrizioni

….The prescription cascade



Rochon, P. A et al. BMJ 1997;315:1096-9

ORIGINAL CONTRIBUTION

National Surveillance of Emergency Department Visits for Outpatient Adverse Drug Events

Daniel S. Budnitz, MD, MPH
Daniel A. Pollock, MD
Kelly N. Weidenbach, MPH
Aaron B. Mendelsohn, PhD, MPH
Thomas J. Schroeder, MS
Joseph L. Annest, PhD

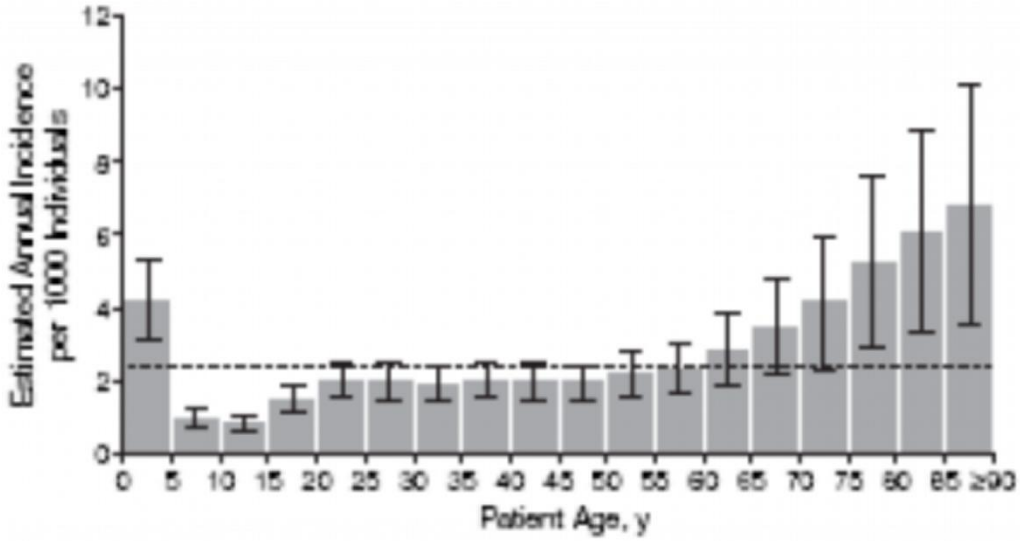
Context Adverse drug events are common and often preventable causes of medical injuries. However, timely, nationally representative information on outpatient adverse drug events is limited.

Objective To describe the frequency and characteristics of adverse drug events that lead to emergency department visits in the United States.

Design, Setting, and Participants Active surveillance from January 1, 2004, through December 31, 2005, through the National Electronic Injury Surveillance System–Cooperative Adverse Drug Event Surveillance project.

- Per due anni (2004 e 2005) sono state registrati gli accessi per sospette ADR in 63 DEA di ospedali USA, rappresentativi della realtà degli Stati Uniti.
- Sono stati registrati 21.298 ADR, cioè 2,4 casi per 1000 abitanti.
- Gli individui >65 anni avevano una probabilità due volte e mezzo maggiore di andare in PS e di 8 volte di essere ricoverati per un'ADR

Figure. Estimated Annual Incidence of Adverse Drug Events Treated in US Emergency Departments



The estimated annual population rate of adverse drug events (dotted line) is 2.4 per 1000 (95 % confidence interval, 1.7-3.0). Error bars represent 95 % confidence intervals. Data are from the 2004-2005 National Electronic Injury Surveillance System–Cooperative Adverse Drug Event Surveillance project.

Table 2
Ten Most Commonly Administered Potentially Inappropriate Medications in Sample of Interest

Medication	Estimated Number	Percentage of Visits	95% CI
Promethazine	5,889,976	5.08	4.87–5.29
Ketorolac	3,696,537	3.19	3.03–3.35
Propoxyphene	3,043,306	2.63	2.50–2.75
Meperidine	2,785,735	2.40	2.26–2.55
Diphenhydramine	1,360,910	1.17	1.10–1.25
Clonidine	1,293,805	1.16	1.08–1.25
Hydroxyzine	930,219	0.82	0.76–0.88
Diazepam	898,733	0.78	0.72–0.84
Cyclobenzaprine	601,431	0.52	0.47–0.57
Nifedipine	405,871	0.35	0.31–0.39

Weighted estimate for total number (and percentage) of visits associated with most common prescribed/administered PIMs in the target population from 2000–2006.

"Eliminare l'impiego dei primi due farmaci in classifica ridurrebbe del 40% il totale delle somministrazioni potenzialmente inappropriate"

MEURER, ACAD EMERG MED, 2010

Fra gli analgesici, quali dovremmo evitare?

Table 4
Inappropriate medications in the elderly

Medication (with example)	Reason for status
Amphetamines/anorexic agents	Potential for dependence, hypertension, angina, myocardial infarction
Analgesics	
Pentazocin	CNS adverse effects, also mixed agonist-antagonist
Meperidine	Not as effective as other narcotics
Indomethacin	CNS adverse effects
Ketorolac	Potential for GI bleed
NSAIDs	Potential for GI bleed, renal failure, high blood pressure, heart failure
Antianxiety agents/sedative/hypnotics	
Long-acting benzodiazepines	Highly addictive, cause more side effects than sedative/hypnotics
	Better alternatives available
Short-acting benzodiazepines	Smaller doses are safer
Barbiturates	Highly addictive; better alternatives available
Meprobamate	Highly sedating anxiolytic; need to withdraw slowly
Antiarrythmic agents	
Disopyramide	Negative iontrope, can cause heart failure; strong anticholinergic
Amiodarone	Lack of efficacy in older patients, prolong QT interval/torsades

BLANDA, EMERG MED CLIN N AM, 2006

Intern Emerg Med
DOI 10.1007/s11739-017-1705-x

CE - ORIGINAL

Italian intersociety consensus on prevention, diagnosis, and treatment of delirium in hospitalized older persons

Giuseppe Bellelli[1] · Alessandro Morandi[1] · Marco Trabucchi[1] · Guido Caironi[2] · Daniele Coen[2] · Carlo Fraticelli[2] · Ciro Paolillo[2] · Carolina Prevaldi[2] · Angela Riccardi[2] · Gianfranco Cervellin[2] · Corrado Carabellese[3] · Salvatore Putignano[3] · Stefania Maggi[4] · Antonio Cherubini[4] · Paola Gnerre[5] · Andrea Fontanella[5] · Nicola Latronico[6] · Concezione Tommasino[6] · Antonio Corcione[6] · Giovanni Ricevuti[7] · Nicola Ferrara[7] · Francesco De Filippi[8] · Alberto Ferrari[8] · Mario Guarino[9] · Maria Pia Ruggieri[9] · Pietro Amedeo Modesti[10,14] · Carlo Locatelli[11] · Patrizia Hrelia[11] · Marco Otto Toscano[12] · Emi Bondi[12] · Antonio Tarasconi[13] · Luca Ansaloni[13] · Francesco Perticone[10]

Received: 30 May 2017 / Accepted: 27 June 2017

IL DELIRIO NELL'ANZIANO:

È molto più frequentemente correlato ad un'inadeguata analgesia piuttosto che ad un effetto avverso da oppiacei

LYNCH ET AL, ANESTH ANALG , 1998

IL DELIRIO NELL'ANZIANO:

- **In pazienti con deficit cognitivo:**

4 volte più frequente in coloro che ricevono 10 mg/die di morfina rispetto a coloro che ne ricevono >30 mg/die

- **In pazienti senza deficit cognitivo:**

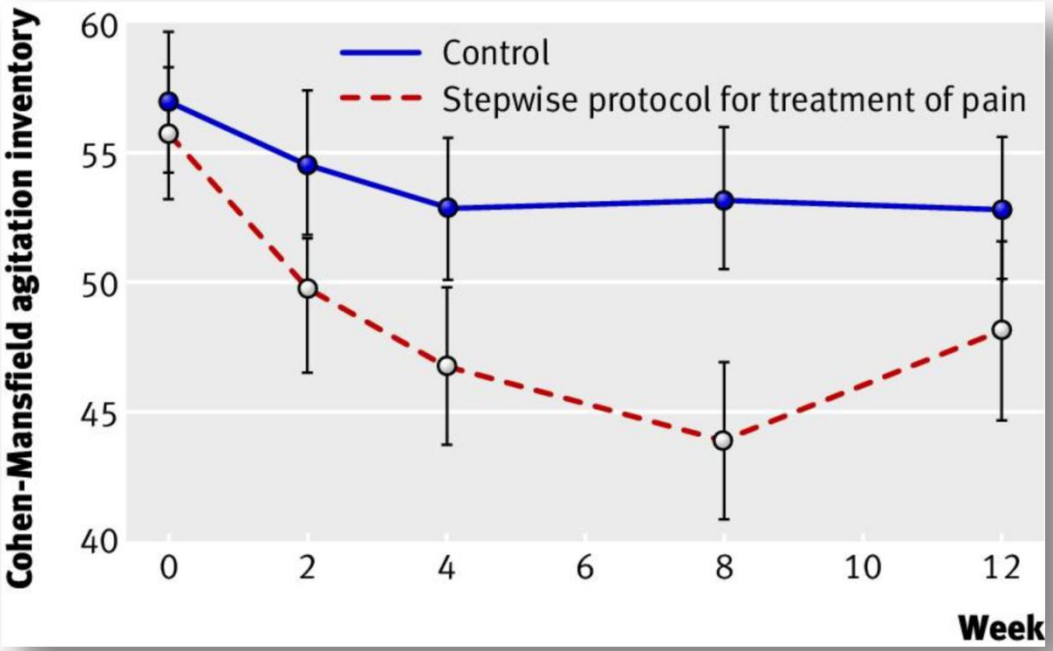
25 volte più frequente in coloro che ricevono le dosi più basse di morfina

MORRISON ET AL, J PAIN SYMPTOM MANAG, 2000

Efficacy of treating pain to reduce behavioural disturbances in residents of nursing homes with dementia: cluster randomised clinical trial

Bettina S Husebo *postdoctoral fellow*[1], Clive Ballard *professor*[2], Reidun Sandvik *registered nurse*[1], Odd Bjarte Nilsen *statistician*[3], Dag Aarsland *professor*[4]

BMJ, 2011



ANNALS OF EMERGENCY MEDICINE APRIL 2012

Systematic Review Snapshot
Clinical Synopsis

TAKE-HOME MESSAGE

According to limited evidence, emergency physicians should avoid meperidine and consider prescribing oxycodone to elderly patients when narcotics are indicated for pain control.

METHODS

DATA SOURCES

MEDLINE, EMBASE, PsychInfo, and Allied

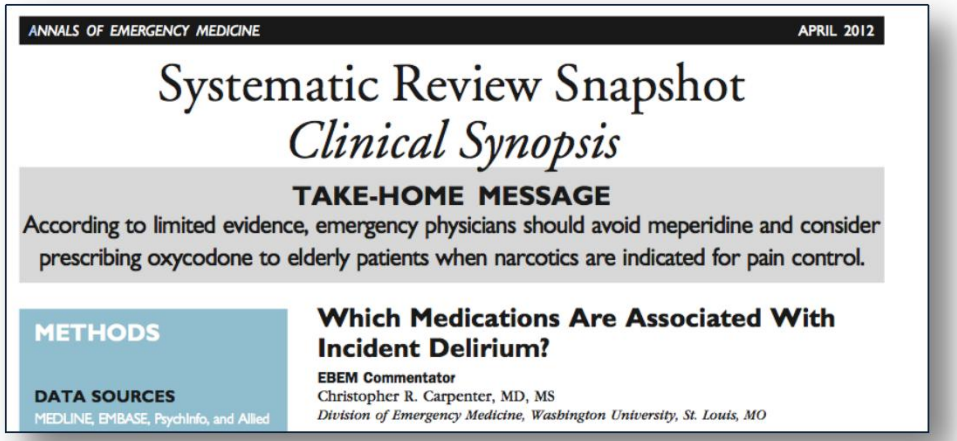
Which Medications Are Associated With Incident Delirium?

EBEM Commentator
Christopher R. Carpenter, MD, MS
Division of Emergency Medicine, Washington University, St. Louis, MO

Ann Emerg Med, 2012

"L'evidenza più stringente che emerge da questo lavoro riguarda l'analgesia con oppiacei:

- **Evitare la meperidina**
- **Dosi inferiori di oppiacei – in pazienti chirurgici – paradossalmente incrementano il rischio di delirio."**



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Christopher R. Carpenter, MD, MS

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“La fisiopatologia della relazione inversa tra la dose dell’oppiaceo ed il delirio non è stata ancora ben descritta: più probabilmente rappresenta un problema multifattoriale, cui concorrono gli effetti del dolore acuto sul sistema nervoso centrale.”

CARPENTER, ANN EMERG MED, 2012

Solo farmaci

Effect of a musical intervention on tolerance and efficacy of non-invasive ventilation in the ICU: study protocol for a randomized controlled trial (MUSique pour l'Insuffisance Respiratoire Aigue - Mus-IRA)

Jonathan Messika[1,2,3,12*], David Hajage[4,5,6], Nataly Panneckoucke[1], Serge Villard[1], Yolaine Martin[1], Emilie Renard[1], Annie Blivet[1], Jean Reignier[9], Natacha Maquigneau[9], Annabelle Stoclin[10], Christelle Puechberty[10], Stéphane Guétin[11], Aline Dechanet[6,7,8], Amandine Fauquembergue[6,7,8], Stéphane Gaudry[1,4,5], Didier Dreyfuss[1,2,3] and Jean-Damien Ricard[1,2,3]

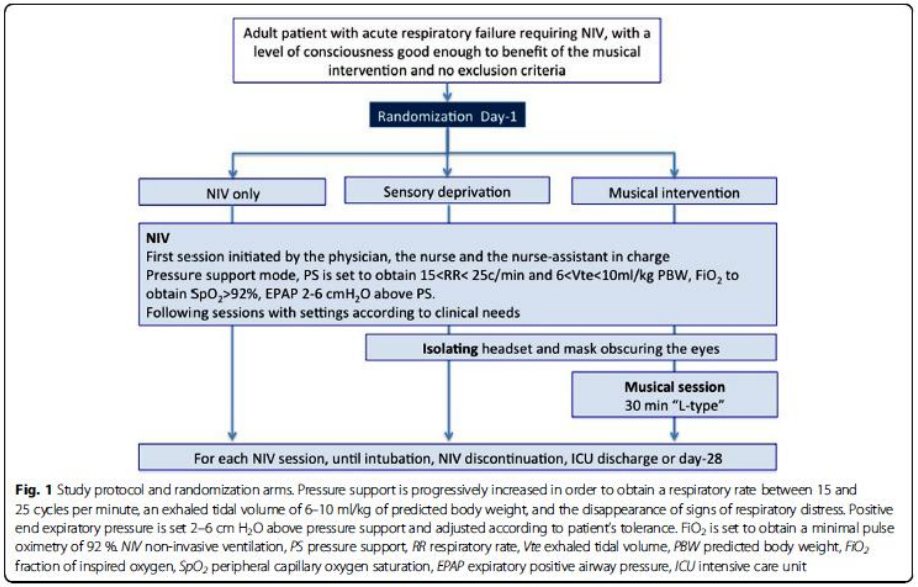

Fig. 1 Study protocol and randomization arms. Pressure support is progressively increased in order to obtain a respiratory rate between 15 and 25 cycles per minute, an exhaled tidal volume of 6–10 ml/kg of predicted body weight, and the disappearance of signs of respiratory distress. Positive end expiratory pressure is set 2–6 cm H_2O above pressure support and adjusted according to patient's tolerance. FiO_2 is set to obtain a minimal pulse oximetry of 92 %. *NIV* non-invasive ventilation, *PS* pressure support, *RR* respiratory rate, *Vte* exhaled tidal volume, *PBW* predicted body weight, FiO_2 fraction of inspired oxygen, SpO_2 peripheral capillary oxygen saturation, *EPAP* expiratory positive airway pressure, *ICU* intensive care unit

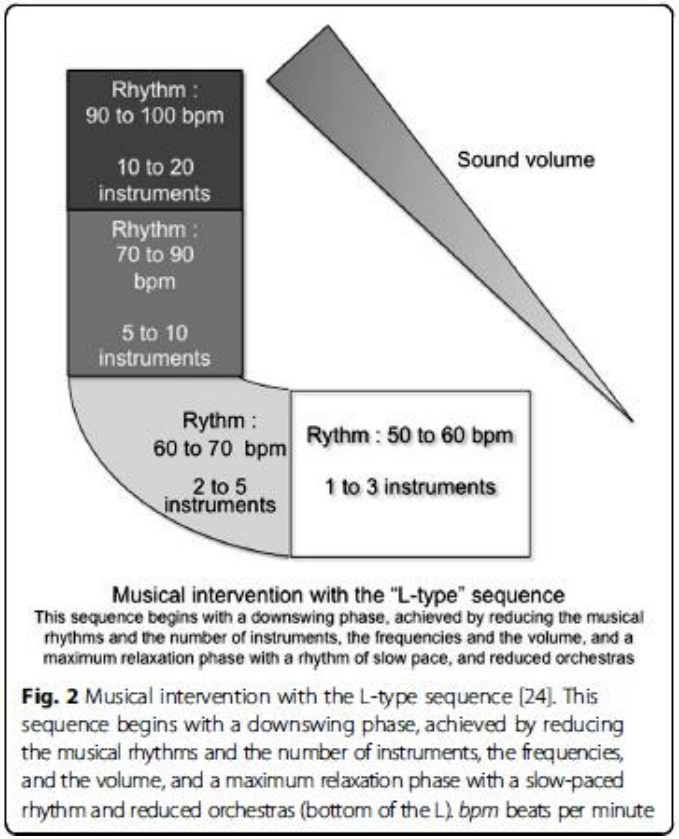

Fig. 2 Musical intervention with the L-type sequence [24]. This sequence begins with a downswing phase, achieved by reducing the musical rhythms and the number of instruments, the frequencies, and the volume, and a maximum relaxation phase with a slow-paced rhythm and reduced orchestras (bottom of the L). *bpm* beats per minute

Music therapy has shown its beneficial effects on patient anxiety, pain [24], and physiological events (heart rate, blood pressure) either outside [15, 42–44] or inside the ICU [16–20]. These studies showed that


Sedazione
Analgesia
Urgenza

SCIENTIFIC REPORTS

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The role of touch in regulating inter-partner physiological coupling during empathy for pain

Received: 18 January 2017
Accepted: 2 May 2017
Published online: 12 June 2017

Pavel Goldstein[1,2,3], Irit Weissman-Fogel[4] & Simone G. Shamay-Tsoory[1]

The human ability to synchronize with other individuals is critical for the development of social behavior. Recent research has shown that physiological inter-personal synchronization may underlie behavioral synchrony. Nevertheless, the factors that modulate physiological coupling are still largely unknown. Here we suggest that social touch and empathy for pain may enhance interpersonal physiological coupling. Twenty-two romantic couples were assigned the roles of target (pain receiver) and observer (pain observer) under pain/no-pain and touch/no-touch conditions, and their ECG and respiration rates were recorded. The results indicate that the partner touch increased interpersonal respiration coupling under both pain and no-pain conditions and increased heart rate coupling under pain conditions. In addition, physiological coupling was diminished by pain in the absence of

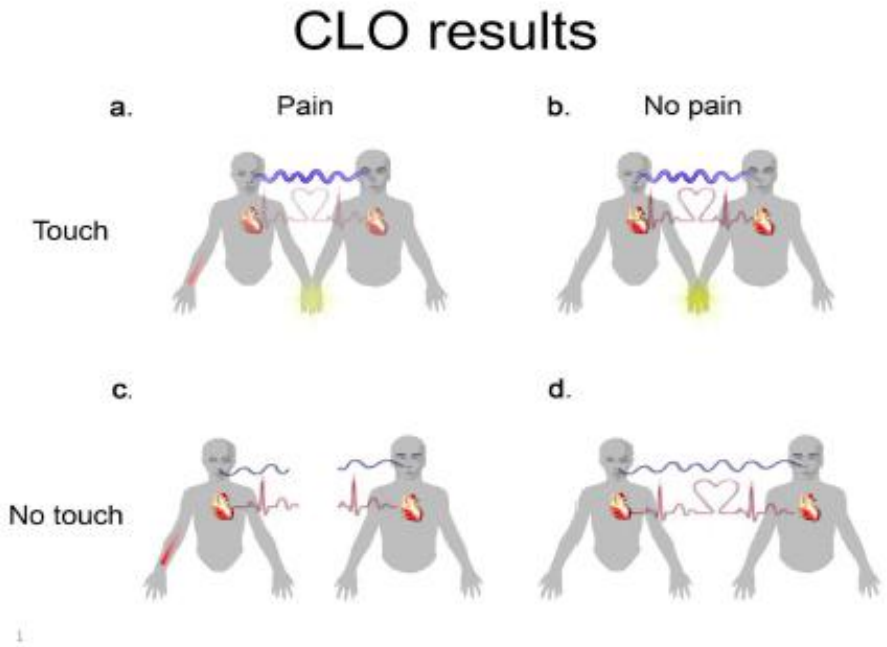

Figure 3. Graphical representation of Coupled Linear Oscillator (CLO) model findings for heart rate and respiration (Fig. 2). Blue lines represent respiration inter-partner coupling and red lines represent coupling in heart-rate. The line's thickness represents the strength of the coupling, with broken lines denoting a total lack of the coupling. (**a**) Coupling of respiration and heart rate during *touch-pain* condition. (**b**) Coupling of respiration and heart rate during *touch-no pain* condition. (**c**) No coupling of respiration and heart rate during *no touch-pain* condition. (**d**) Coupling of respiration and heart rate during *no touch-no pain* condition.

SIAARTI – GRUPPO DI STUDIO BIOETICA – Coordinatore Dr. Alberto Giannini

SIAARTI
SOCIETÀ ITALIANA DI ANESTESIA ANALGESIA RIANIMAZIONE E TERAPIA INTENSIVA
PRO VITA CONTRA DOLOREM SEMPER

GRANDI INSUFFICIENZE D'ORGANO "END STAGE":

CURE INTENSIVE O CURE PALLIATIVE?

"DOCUMENTO CONDIVISO"

PER UNA PIANIFICAZIONE DELLE SCELTE DI CURA

Maria, 90 anni

- Dimessa il pomeriggio dalla nostra M.U. per shock settico end-stage

- 7 figli di cui 2 al Nord

“il professore ha detto che deve fare la dialisi!”

Quando si diventa anziani?

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Come si fa
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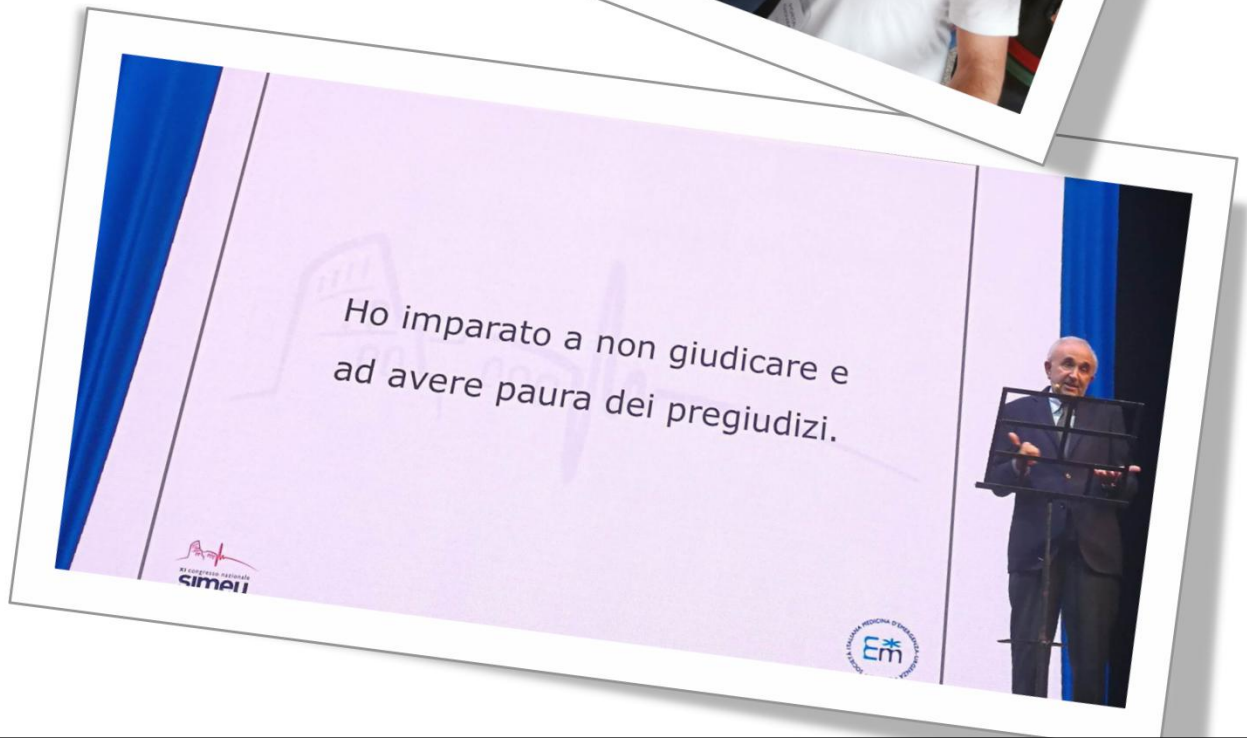
Ho imparato a non giudicare e
ad avere paura dei pregiudizi.